LumaCan™ Phase Cut Dimmer
Cat. No. DRDDP

LEVITON®

WARNINGS
- **TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER AT CIRCUIT BREAKER OR FUSE AND TEST THAT POWER IS OFF BEFORE WIRING!**
- To be installed and/or used in accordance with appropriate electrical codes and regulations.
- If you are unsure about any part of these instructions, consult an electrician.
- To avoid electrical overload, total connected lamp load shall not exceed output rating.
- This equipment permits more than one power supply output source.
- Do not mount near gas or electric heaters.

CAUTIONS
- Use this device with copper or copper clad wire only.
- For indoor applications only.
- Test all network cables for proper pin-out configuration prior to interconnecting devices and systems.
- If you are unsure about any part of these instructions, consult an electrician.
- Save these instructions.

DI-002-DRDDP-00B

Product Description

The GreenMAX™ DRC Phase Cut Dimmer provides dimming of phase control loads, either forward or reverse phase, LumaCAN network connectivity, and full integration into Leviton's GreenMAX DRC system.
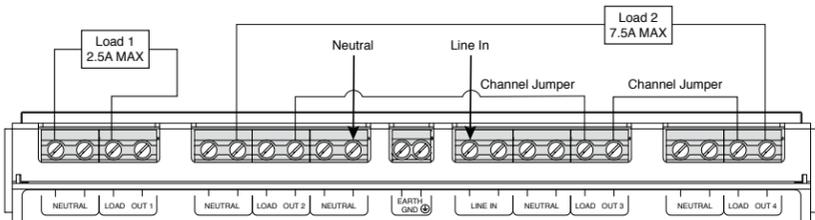
Before Installation

- Dimmer modules should be installed in a suitable DIN rail enclosure.
- All mains wiring should be done in accordance with local authority wiring regulations.
- Appropriate isolation shall be maintained between Line and Low Voltage cabling.
- For more information on network wiring, see the Leviton GreenMAX DRC Installation Guide and training videos at www.Leviton.com.
- Confirm load type and amount is within product capabilities as not all load types are supported.
- Confirm Channel/Load requirements to plan for installation, when multiple channels are to be combined for additional current capacity, refer to AMPlify feature for details.

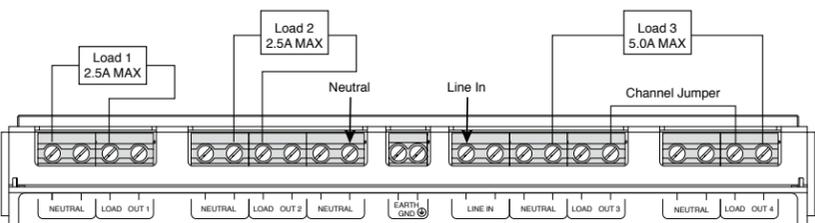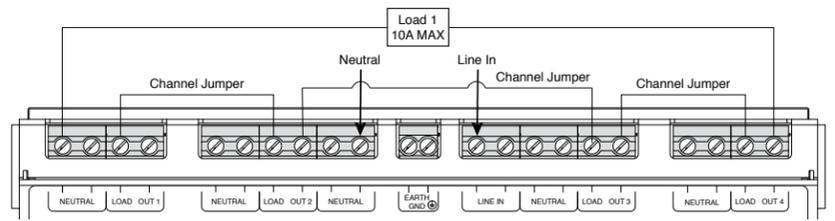| SPECIFICATIONS	
Catalog No.	DRDDP-A40 (4 Channel)
Input Voltage/Frequency	120-277VAC, 50/60Hz
Max Input Current	10A
Load Ratings	
LED,CFL, Electronic Ballast, Incandescent, Tungsten @ 120V	2.5A (300W)/Channel (See channel ganging chart for additional details)
LED,CFL, Electronic Ballast, Incandescent, Tungsten @ 277V	2.5A (693W)/Channel (See channel ganging chart for additional details)
IP Rating / Enclosure	IP20
Pollution Degree	2
UL Disconnection Type	Type 1
UL Voltage Category	4,000V
Terminal Torque Rating, Line & Low Voltage	4.4 in.-lbs. (0.5Nm)
Network Connections	(2) RJ-45, CAT6A or better for connection to LumaCAN network. Termination provided via local termination plug.
Network Topology	• Daisy Chain, 1600' Max between repeaters. • Home-Run topology and network length up to 10,000' can be achieved when using LumaCAN network repeaters (Leviton # NPRPT) • Maximum 110 nodes between repeaters Maximum 250 nodes on a LumaCAN network
LumaCAN Power Input	+12-24Vdc, 200-100mA
Operating Temperature (In DIN rail cabinet)	0° C - 60°C (32° F - 140° F)
Storage Temperature	-40° C- 85° C (-40° F - 185° F)
Purpose of Control	Operating Control
Construction of Control	Independently Mounted Control for Panel Mount

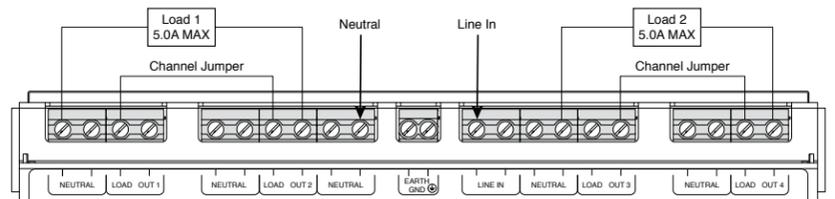## Wiring Diagrams
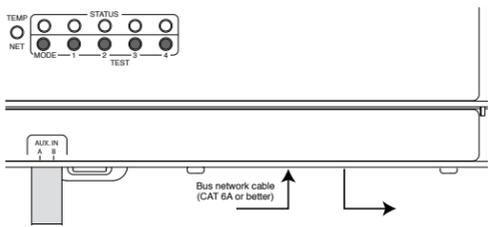
1 Channel (10A)

2 Channel (1x2.5A,1x7.5A)
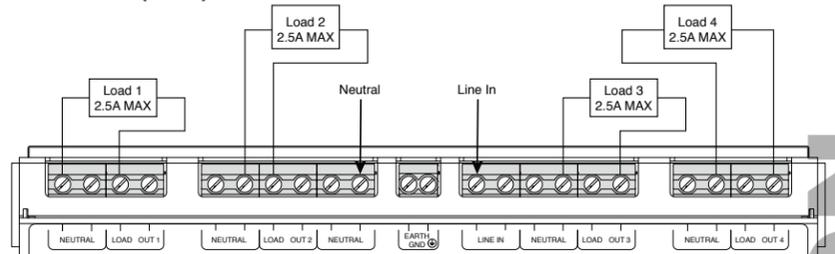

2 Channel (5A)

3 Channel (2x2.5A, 1x5A)


4 Channel (2.5A)

Installation

WARNING: TO AVOID FIRE, SHOCK, OR DEATH; TURN OFF POWER at circuit breaker or fuse and test that power is off before wiring!

1. Mount dimmer on DIN rail.

  a. Line top of module against the back of the cabinet and slide the module down onto rail.

  b. Push module towards the rail.

  c. Push up on mounting clip to lock module in place.

DIN rail

To remove from DIN rail
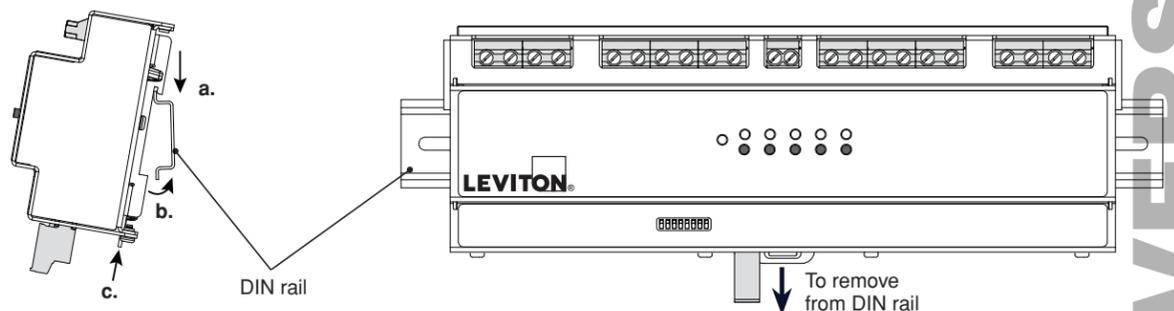
2. Remove/add channel jumpers depending on configuration.

3. Wire "feeder" input to Line Input Terminal.

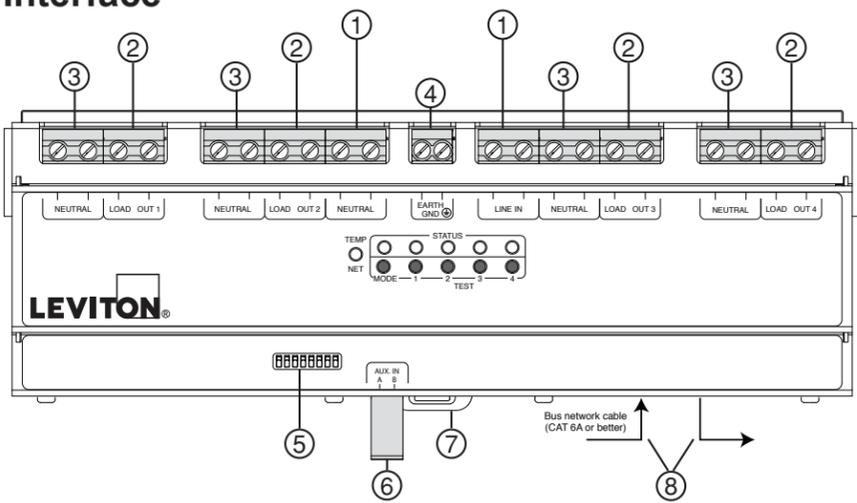**4.** Connect Loads to Load Output Terminals.

5. Connect Network Wiring.

6. Power-up dimmer and confirm load operation using dimmer test switches. Your Dimmer is now ready for network configuration.
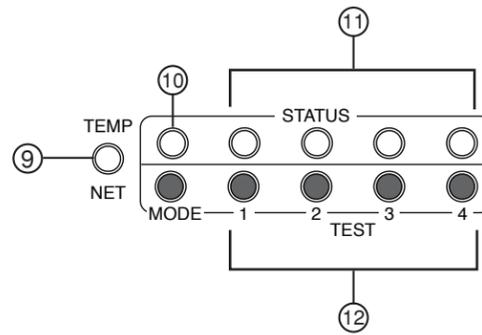
  Note: Ensure last node on network is terminated.

WEB VERSION

Interface

9. Indicator light - Displays device operating temperature status
   a. TEMP indicator
   - Green – Normal
   - Amber – Warm
   - Red flashing – Hot
   - Red solid – Shutdown
   b. NET indicator
   - Blinks during TX/RX of network data
   - Blinks Green upon TX/RX of LumaCAN network data.
   - Blinks Cyan once every two seconds, indicating that a LumaCAN address is pending assignment.

1. Line In and Neutral: Common to all channels.
2. Load Out 1, 2, 3, 4: Connects to the load for each channel.
3. Neutral: Individual neutral for each channel.
4. Earth Ground: Common to all channels
5. LumaCan Address & Start Channel Assignment DIP Switches
6. Aux In A & B: Auxiliary active high (+24V) or dry contact input (for future use)
7. DIN Rail Mounting Clip
8. LumaCan: Network input and feedthrough RJ45

10. MODE LED Indicator & Button: Used to select and display device operating modes. (see below)
11. Channel status 1, 2, 3, 4: Individual indicator for each channel.
    a. Indicator intensity follows channel level
    b. Alternates from 25%->50%->100%->0%
12. Channel button 1, 2, 3, 4: Individual channel status selector

Configuration

Device can be programmed through the GreenMAX DRC System app when connected to a GreenMAX DRC room controller.
In applications where you are not using GreenMAX DRC room controllers, limited configuration capability is available from the front panel of the devices.
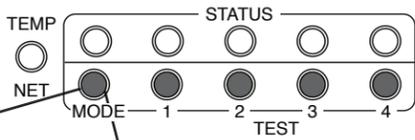
1. To enter program mode: Press and hold for approximately 5 seconds until indicator turns red.

2. To toggle between Phase Control and AMPlify setup, press and release.
Red - Phase Control
Blue - AMPlify

To perform a factory reset: Press and hold for approximately 20 seconds until indicator light flashes rapidly, then release. The device will then revert to the factory default operation.
NOTE: Default operation is single channel mode.
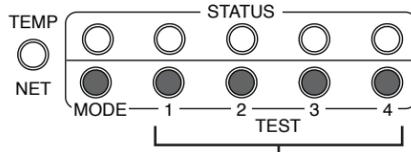
AMPlify Feature

Two or more channels can be wired in parallel to AMPlify your load carrying capacity.
In order to use this feature:
   • Jumper must be installed between channels you want to combine.
   • Software must be configured. Go to Leviton.com.
The chart to the right indicates the configurations and operating modes which are supported:

Phase Control Method Selection

To toggle between Forward and Reverse Phase Control, press and release the corresponding channel button.
   ON - Forward Phase Control
   OFF - Reverse Phase Control

AMPlify Feature Mode Selection

Only a limited number of configurations are supported from the front panel. Other configurations can be set from the GreenMAX DRC system programming tools.

Channel LED indicators lights up to indicate that the channel is grouped together. Press/Release the channel buttons to change the grouping.

Refer to chart below to see which LED Indicator combinations correspond with each channel mode.

Mode	No. of Channels	Channel 1 Capacity	Channel 2 Capacity	Channel 3 Capacity	Channel 4 Capacity	LED Indicators 1	2	3	4
1*	1	10A	Jumper to 1	Jumper to 2	Jumper to 3	ON	ON	ON	ON
2A	2	2.5A	7.5A	Jumper to 2	Jumper to 3	OFF	ON	ON	ON
3	3	2.5A	2.5A	5A	Jumper to 3	OFF	OFF	ON	ON
4	4	2.5A	2.5A	2.5A	2.5A	OFF	OFF	OFF	OFF

The following mode is only configurable via GreenMAX DRC App

| 2B | 2 | 5A | Jumper to 1 | 5A | Jumper to 3 | | | | |

* Default Mode from the factory is single (1) channel mode with jumpers installed between all four channels. In this mode, the dimmer operates like a single channel dimmer with max capacity of 10A. For other configuration, jumpers must be removed as per the chart above.
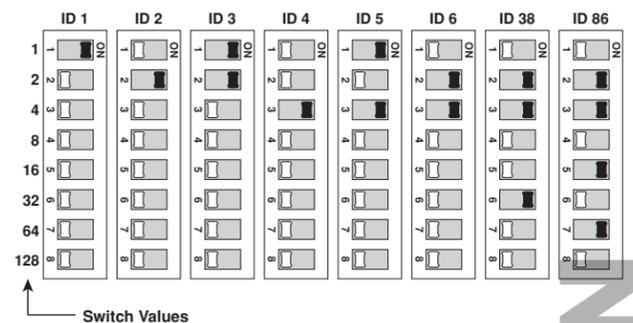
LumaCAN Network Termination

The last Node in a LumaCAN network must have the termination jumper/plug installed. Your unit ships with a termination plug (P/N #LCTRM) installed into one of the RJ-45's.

a. If this device is at the end of the line, the jumper shall remain installed and the network cable shall be connected to the other plug.
b. If this device will be in the middle of a network run, remove the plug and save for future use.
c. If the plug was removed but is at the end of the line, the termination plug must be reinstalled.

LumaCAN Network Addressing

• All devices on a LumaCAN network require a unique address, and sensors require a unique input. This device supports auto-addressing and auto-configuration which, is the preferred method of address assignment.
• A GreenMAX DRC Room Controller (software release 1.70 or later) will assign a unique address to all devices on the network.
• For auto-addressing to work, all dip-switches must be set to OFF.
• Network status LED will blink Cyan once every two seconds indicating that LumaCAN address has not yet been assigned.
• Set DIP switches 1-8 to the desired LumaCAN address.
• If Automatic Addressing can not be used in your system, an LumaCAN node address can be manually assigned.
• A unique LumaCAN address ID must be set for each LumaCAN device. Valid node addresses are 1-250. If the node ID's are defined in your Contract Document, set to that address.
• If not, ensure that the ID is unique for each device in the system. It's helpful, although not required, that the location of each node ID is documented for use by Leviton Field service during system commissioning.
• To set the node ID, set the DIP switches to the desired ID, as indicated by the illustration on the right.

ID Address Value = Sum of Switch Values
ID 86 = 2+4+16+64

Switch Values

WEB VERSION